

NASA News

National Aeronautics and
Space Administration

Washington, D.C. 20546
AC 202-453-8400

For Release:

UPON RELEASE OF PRESIDENT'S
BUDGET MESSAGE, 1:30 P.M.
FEBRUARY 4, 1985

NASA BUDGET PRESS CONFERENCE

STATEMENT OF JAMES M. BEGGS, ADMINISTRATOR

FEBRUARY 4, 1985

I am pleased to have this opportunity to discuss President Reagan's proposed budget for NASA for Fiscal Year 1986.

The President has requested a NASA budget of just under \$7.9 billion.

In a year of budgetary restraint, this is a modest, though forward-looking budget. It reflects the President's determination to continue America's leadership in space and to advance towards our goal of a permanently manned Space Station in conjunction with our foreign friends. Our objectives are to begin Space Station design and development in 1987 and to attain initial operational capability within a decade.

Considering the constrained fiscal environment in which all programs must be considered, I am satisfied that this budget allows us to make solid progress in both aeronautics and space, in keeping with our Congressional mandate.

The budget includes some unforeseen items not included in our budget planning estimates last year, including two Congressionally-mandated projects: the development of the Advanced Communications Technology Satellite (ACTS), scheduled for flight in 1989; and the acceleration of the Advanced Turboprop Propulsion System, scheduled for flight testing in FY 1987.

It also reflects an early payment to the Federal Financing Bank to reduce interest and total cost of the Tracking and Data Relay Satellite System program; and funding of our efforts to encourage the commercial use of space, which the President has deemed a vital national priority.

We will continue to give top priority to the Space Transportation System. We will work to refine its elements to meet our goal of developing an efficient, reliable and cost-effective national resource to fill our continuing space transportation needs through the end of this decade and beyond.

The initiative in this budget on the Orbiting Maneuvering Vehicle (OMV) is consistent with that goal. It would support the completion of definition studies and initial development of the OMV, a remotely-piloted, unmanned, reusable spacecraft to be used to extend the Shuttle's on-orbit operational range and capabilities.

This budget also will support the remaining development, launch and operation of several major ongoing programs in Space Science and Applications.

The ASTRO payload, a set of three special telescopes, will fly aboard the Shuttle early in 1986 to observe Comet Halley.

In the late spring of 1986, the Galileo Mission to Jupiter will be launched. An option has been added to allow the spacecraft to fly by the asteroid Amphitrite in December 1986. Galileo will arrive at Jupiter in December 1988 to study the planet and its satellites from orbit and send an instrumented probe into its atmosphere.

We will take advantage of the planetary configuration in that same launch window to launch the Ulysses spacecraft, formerly known as the International Solar Polar Mission. The spacecraft will be launched toward Jupiter. The strong gravitational force in that planet's vicinity will cause the spacecraft to accelerate into a trajectory that will enable it to study the Sun at high latitudes, something we never have been able to do before.

Later in 1986, we will launch the Hubble Space Telescope, an orbiting observatory that will peer out seven times further, see objects 50 times fainter, with ten times the clarity than we can now with astronomical observatories on earth.

And finally, during FY 1986, the Voyager spacecraft will encounter Uranus and give us the first close-up look at that still unexplored planet, before proceeding on to an encounter with Neptune in 1989.

This budget represents four major appropriations' requests, which I will summarize now.

First, a total of \$2.9 billion is requested for Research and Development. This is about 36 per cent of the total budget request. The increase over FY 1985 reflects the phasing of previously approved Space Science and Applications programs; the development of the Advanced Communications Technology Satellite;

the initiation of the OMV; and the effort to promote the commercial use of space. The \$230 million included in this R&D request for the Space Station, will enable us to make solid progress in advanced technology and the definition phase.

Second, \$3.5 billion is proposed for Space Flight, Control and Data Communications to support Shuttle production, operations and tracking and data acquisition. This represents a decrease of \$92 million from last year's budget plan.

Third, \$149 million is proposed for Construction of Facilities, down one million from FY 1985.

Finally, the request for Research and Program Management is \$1.3 billion, representing a level of effort lower than last year's due to administrative economies and small inflationary price adjustments.

The fourth Shuttle orbiter, Atlantis, will join the fleet this spring and is scheduled to fly its first mission this year. Although we are well into the Shuttle's operational phase, we will continue to work to improve performance, procure spare parts and enhance reliability, all of which this budget will support.

Some of the other activities this budget will finance include:

- . Continued development of Space Science and Applications flight missions. In addition to the Hubble Telescope and the Ulysses and Galileo missions, planned for launch in 1986, we will be working on future missions, including the Venus Radar Mapper; the Gamma Ray Observatory; the Mars Observer; the Upper Atmospheric Research Satellite and the Advanced Communications Technology Satellite.

- . Continued design and development of the Scatterometer sensor for the Navy Remote Ocean Sensing System (N-ROSS), planned for launch in mid - 1989. The Scatterometer will provide accurate, global measurements of the ocean's surface winds; permit the first global study of their influence on ocean circulation; and help to improve marine forecasting.

- . Operation of a system of three Tracking and Data Relay Satellites, and continued phasing-down of our ground-based tracking and data relay network;

- . Two dedicated Shuttle flights of Spacelab, the orbital research laboratory that fits into the Shuttle's cargo bay; two other major Spacelab missions; and a number of smaller Spacelab payload missions;

- . First use of the Centaur Upper Stage in the Shuttle for the Galileo and Ulysses missions; and

- . Thirteen to fourteen Shuttle missions, including the first to be launched from Vandenberg Air Force Base, California.

This budget will also allow continued advanced research and technology development in the NASA aeronautics program, which has been the fundamental source of United States preeminence in aeronautical technology and in civil and military aircraft.

In addition to progress in general and generic technologies, major areas of emphasis will include: the Numerical Aerodynamic Simulation effort, designed to provide our aerospace community with the world's premier scientific computational capability; and the Advanced Turboprop Propulsion System, to provide technology for a new generation of fuel-efficient aircraft.

In closing, I want to stress that the President's efforts to cut government spending and reduce the budget deficit have our firm support. Their success is essential if our economy is to grow and prosper.

NASA, like all government agencies, is doing its part to advance those goals. Under this budget, our Space Station definition and development efforts will proceed at a somewhat slower pace than planned last year. We are planning to cancel the Advanced Composite Structures Program in Aeronautics. And we will be unable to initiate any new projects in the Space Science and Applications program this year, much as we would like to do so.

But we will continue to plan for future initiatives in that area and in others.

At a time when we are making stringent efforts at budget economies, the Administration has given NASA a vote of confidence that reflects strong Administration and public support. We do not take this responsibility lightly. It increases our burden to strive for excellence in all we do. And it reinforces our determination to ensure that every dollar we spend is spent wisely and well.

We will continue to help build a firm base for American leadership in space and aeronautics. That base has been vital to our past success, and will be indispensable to our future progress.

Thank you very much.

1985 BUDGET BRIEFING
FEBRUARY 4, 1985

JOHNSON: Good afternoon, ladies and gentlemen. For those of you that I haven't met, my name is Frank Johnson, and I am the Director of Public Affairs for NASA.

Welcome to the NASA Budget Briefing for the fiscal year 1986. I'd like to introduce to you Jim Beggs, the Administrator, and Tom Newman, our Comptroller. Mr. Beggs will have a short statement, and he and Mr. Newman will answer questions.

In addition to that, our Associate Administrators will be here to answer further questions. Sam Keller, Deputy Associate Administrator for Space Science and Applications. Jesse W. Moore, Associate Administrator for Spaceflight. Philip E. Colpertson, Associate Administrator for the Space Station. Dr. John Martin, Associate Administrator for Aeronautics and Space Technology. Robert O. Ouler, Associate Administrator for Space Tracking and Data Systems. And there will be other NASA officials present if we have questions that need to be addressed.

After the questions here, we will switch to some of the other centers for questions from there. We will be audio-interactive today. Following the press conference, there will be transcripts of Mr. Beggs' statement and some summary data available for those that want it.

Mr. Beggs ...

BEGGS: Good afternoon. I am very pleased to be here with you to discuss the President's budget for NASA for fiscal year 1986. The President has requested a NASA budget of just under 7.9 billion dollars for FY 1986. In a year of budgetary restraint, this is, of course, a modest, although we believe a very forward looking budget. It reflects the President's determination to continue America's leadership in space, and to advance toward our goal for a permanently manned space station, in conjunction with our foreign friends.

Our objectives are to begin space station design and development in 1987 to initial operating capability within the decade. Considering the constrained fiscal environment in which all programs must be considered, I am satisfied that this budget allows to make solid product progress in both aeronautics and space in keeping with our Congressional mandate.

The budget includes some unforeseen items not included in our budget planning estimates last year, including two Congressionally mandated projects: the development of the Advanced Communications Technology Satellite, the ACTS, which is scheduled for flight in 1989; and the acceleration of the Advanced Turbo Prop Propulsion System, schedule for flight testing in FY 1987. It also reflects an early payment to the Federal Financing Bank to reduce interest and total costs of the Tracking and Data Relay Satellite System, and funding for our efforts to encourage the commercial use of space, which the President has deemed a vital, national priority.

We will continue to give top priority to the Space Transportation System. We will work to refine its elements to meet our goal in developing an efficient, reliable, and cost-effective national resource to fill our continuing space transportation needs through the end of this decade and beyond.

The initiative in this budget on the orbiting maneuvering vehicle is consistent with that goal. It would support the completion of definition studies and initial development of the OMV, a remotely piloted, unmanned reusable spacecraft to be used to extend the shuttle's on-orbit operational range and capabilities.

The budget also will support the remaining development, launch, and operation of several major ongoing programs in space science and applications. The Astro payload, its set of three special telescopes, will fly aboard the shuttle early in 1986, and observe Comet Haley.

In the late spring of 1986, the Galileo mission to Jupiter will be launched. And an option has been added to that mission to allow the spacecraft to fly by the asteroid, Ampetriety(?), in December 1986. Galileo will arrive at Jupiter in December 1988 to study the planet and its satellites from orbit, and of course, send an instrumented probe into its atmosphere.

We will take advantage of the planetary configuration in that very same launch vehicle to launch the Ulysses spacecraft, formerly known as the International Solar Polar Mission. The spacecraft will be launched towards Jupiter. The strong

gravitational force in that planet's facility will cause the spacecraft to accelerate into a trajectory which will enable it to study the sun at high latitudes -- something, of course, which we have never been able to do before.

Later, in 1986, we will launch the Hubble Space Telescope, an orbiting observatory that will peer out seven 7 times further, see objects 50 times fainter, with 10 times the clarity of any of our Earth bound astronomical observatories.

And finally, during 1986, the Voyager spacecraft will encounter Uranus, giving us the first close up look of that still unexplored planet, before of course, proceeding onto an encounter with Neptune in 1989.

This project represents four major appropriations requests, which I will summarize very briefly. First, a total of \$2.9 billion is requested for research and development. This is about 36% of the total budget's request. The increase over FY 85 reflects the phasing of previously approved space science and applications programs, the development of the Advanced Communications Technology Satellite, the initiation of the OMV, and the effort to promote the commercial use of space.

The \$230 million included in this R&D request for the space station will enable us to make solid progress in advanced technology and in the definition phase for that very important program.

Second, 3 1/2 billion is proposed for spaceflight control and data communications to support shuttle production,

operations, and tracking and data acquisition. This represents a decrease of \$92 million from last year's budget plan.

And third, \$149 million is proposed for construction of facilities, just about the same as in FY 1985.

And finally, the request for R and PM, Research and Program Management, is 1.3 billion, representing a level of effort lower than last year, due to administrative economies in the small, very small inflationary price adjustments.

The fourth shuttle orbiter, Atlantis, will join the fleet this spring, scheduled to fly its first mission this year. Although we are well into the shuttle's operational phase, we will continue to work to improve the performance of the shuttle, procuring spare parts, and answering reliability. All of those items, this budget will support.

Some of the other activities -- continuing development of space science and applications flight missions, in addition to the Hubble telescope and the Ulysses and Galileo missions, we will be working on several future missions, including the Venus Radar Mapper, the Gamma Ray Observatory, the Mars Observer, the Upper Atmosphere Research Satellite and the Advanced Communications Technology Satellite.

Continued design and development of the Scatterometer(?) Sensor for the Navy Remote Ocean Sensing System, the NROSS, planned for launch in mid-1989. The scatterometer will provide accurate global measurements to the ocean surface winds. It will permit the first global study of their influence on ocean

circulation, and help to improve marine forecasting.

The operation of the system of three tracking and data relay satellites, and continued phasing down of our ground based tracking and data relay network. Two dedicated shuttle flights of spacelab, the orbital research laboratory that fits into the cargo bay. Two other major space lab missions, and a number of smaller space lab payload missions. First use of the Centar(?) upper stage in the shuttle for the Galileo and Ulysses missions, and 13 to 14 shuttle missions, including the first launch from the Vandenburg West Coast site.

This budget will also allow continued advanced research and technology in the NASA Aeronautics Program, which has been, of course, a fundamental source of United States preeminence in aeronautical technology, both civil and militart.

In addition to progress in general and generic technologies, major areas of emphasis will include the numerical aerodynamics simulation effort, designed to provide our aerospace community with the world's premere scientific computational capability, and the advanced turbo prop propulsion system to provide technology for a new generation of fuel efficient aircraft.

Finally, I want to stress that the President's efforts to cut government spending and reduce the budget deficit have our firm support. Their success is essential if our economy is to grow and prosper. NASA, like all government agencies, is doing its part to advance those goals.

Under this budget, our space station definition of

development efforts will proceed at a somewhat slower pace than planned last year. We are planning to cancel the Advanced Composite Structures Program in Aeronautics, and we will be unable to initiate any new projects in space science and applications this year. Much of the science community has impressed upon us the necessity of continuing to advance or move forward in that program, and we will keep that very much in mind in future budgets. We will continue to plan, of course, for future initiatives.

At a time when we are making stringent efforts of budgetary economies, the administration has given NASA a vote of confidence that reflects strong administration and public support. We do not take that responsibility lightly. It increases our burden to strive for excellence in all that we do; it reinforces our determination to insure that every dollar we spend is spent wisely and well.

We will continue to help build for firm base for American leadership in Space and Aeronautics. That base, as we all know, has been essential to our past progress and I trust it will continue to be in the future with this budget.

Thank you very much, and we are now open to questions.

JOHNSON: Thank you. We'll take questions as we always do. Before asking a question, when the microphone comes, please be sure and identify yourself and your media affiliation.

CRAIG TIVULT, AVIATION WEEK: With a question for Mr. Beggs and a second question for the Space Station Program people. Jim, this is, I am interested in your view on your overall spending power in the agency going into 86 compared with the 85. You last year got a so-called agreement out of OMB for a 1% per year growth. How do you assess the spending capability of the agency in 86, considering you didn't, I believe, make that, perhaps you did, and also, what I believe is about a 4% inflation rate that you are facing?

BEGGS: Well, we did, Craig, get the 1% real growth into 86, taking into account that there is a, in line with President's initiatives, there is a 5% pay cut included in this budget. If you take into account that, you'll find that it is right on the 1% real growth. So it does continue that through 86.

Like any other R&D effort that anyone does, there are always unmet priorities, and as I said in my remarks, it is a modest budget, we believe, in light of what we are trying to do, but we think we can maintain the thrust of the program and continue to do all of the things that we have set out to do. It, of course, does not include any new starts in the science program, but one has to consider the fact that in the past several years, we have had a number of new starts in the science program and the space sciences and applications program is at the highest level, both in terms of dollars and in terms of a percentage of the R&D budget than it has been in any year in the last several. So,

we think we can maintain our progress in all of the area with this budget.

JOHNSON: Did you have another question, Craig?

CRAIG: Yes, I do. The second question for the space station people, perhaps Phil Colvertson. In light of the \$230 million request, how does that set with the program plan? Will you stretch space station launch, perhaps in the 1993 or 1994 now? And what does it mean for funding for fiscal 87-88 outyears? Are you going to have a more expensive program?

PHIL COLVERTSON: Well, a change of this amount compared with what we were predicting last year, what we were projecting last, doesn't give us enough real concern to change the projected launch date at all. If there were a change in that, it would be more coming from the years beyond 1986. We will extend the duration of the phase B studies from 18 to 21 months, so that part of the definition will slip further into fiscal 87 than would have otherwise been the case. And that'll increase the definition funding in 87 and reduce the development funding in 87 a little bit.

JOHNSON: Tom Dulling?

DAVE DULLING, HUNTSVILLE TIMES(?): Jim, with XAF(?),

TOPEX, ISTP, and a number of others, you are starting to build up a bow-wave, which was discussed back in the 70's of new starts in science and applications. What is the outlook in the next few year for getting any of these started?

JIM BEGGS: Well, that is a hard question to answer. It largely depends on the progress that is made towards reducing the deficit in the coming several years. There is, with the projections that are made and the ideas, there is a planning wedge there that would permit some new starts. To get all of them in will require a substantial increase in the amounts of money that we get out years, so I think it depends on how stringent the budgetary climate remains in the next several years.

But I am still reasonably optimistic that we'll continue to get a new start or two as we move into the out years.

JOHNSON: Al Rositer?

AL ROSITER, UPI: Mr. Beggs, following up on Craig's question about the space station, the budget analysis book refers to an initial operating capability in the mid-1990's for the space station. Your target last year was 1992 -- can you explain the difference there?

JIM BIGGS: No, my target was never 1992. I agree with

my nobel leader that it would be done within a decade, and we still hold to that. What I have said repeatedly, and you have heard me a number of times on this, the 1992 is an awful nice date. But this budget clearly will not permit 1992, and we'll have to aim at 1993 or 1994.

JOHNSON: Do we have any further questions?

DAVE DULLING, HUNTSVILLE TIMES: This might be one that Mr. Newman needs to answer. Is there any funding or money in here requested to take action on the recommendations that were made by the shuttle science working group, that is co-chaired by Stan Shawhan to make possible low to modest costs spacelab and shuttle based experiments? They were talking about building up, I think, to a funding level of about 25 to 50 million dollars a year. Is there anything in there to start that?

MR. NEWMAN: Yes, there is money to do that.

JOHNSON: We'll take one more question here and then go to Kennedy. Mike?

MIKE MITCH, (?) NEWS SERVICE: The budget generally talks about some layoffs or some cutbacks in personnel. Do you anticipate cutbacks in NASA personnel, Mr. Beggs?

JIM BEGGS: Yes, we have a target of up to 200.

MIKE MITCH: Are they just, is there any particular location or are they ...

JIM BEGGS: We'll do it, if we have to take the full 200, we'll do it by attrition across the board.

MIKE MITCH: And one other -- I noticed that you talk about 13 to 14 flights, fiscal year 86, have you set on a flight number for calendar year 85 yet?

JIM BEGGS: Well, we have. In the calendar year, we are talking about launching, I think, 11, or it may even be 12. I'd prefer 11 (laughter).

JOHNSON: All right, we'll now go to ...

JIM BEGGS: If you are going to publish this, I'd prefer to say 11 (laughter).

JOHNSON: Eleven it is. We'll switch now to the Kennedy Space Center. We will eventually come back here.

Please identify yourself by name and affiliation.

DICK LEWIS, BEACH(?) PUBLISHING: For Mr. Beggs, in the light of the ministerial conference in Rome last week, what would you say are the prospects of ESA participation in the space station, at least in phase B? And how would that affect your 1986 requests?

JIM BEGGS: Well, it doesn't affect our 1986 requests at all. We had contemplated the Europeans and the Japanese joining us in the Phase B. I would say that the results of the Rome conference were very positive in making the prospect of their joining through the phase B effort and quite firm. We are very pleased of the results of the conference, and we are looking forward to meeting with Dr. Lew(?) shortly, probably sometime early in March, to make formal an agreement to participate with us in phase B.

The money we have in the 86 budget should enable us to continue to move in tandem on that effort. The Europeans will not be at all disturbed by a three-month or so slip in our schedule. Quite the contrary, they have always been interested in as much time as we could give them on it. So I think that will go forward very well.

HOWARD BENEDICT, ASSOCIATED PRESS: On the orbital maneuvering vehicle, what is the projected operational date for that, and the projected total costs? And what are some of the capabilities?

JIM BEGGS: Just more.

JOHNSON(?): How did the operational data around the early part of 1990 as our current plan, and I believe that the cost is somewhere around 350 in terms of the total runout cost, Howard.

JIM BEGGS: 350 million.

JOHNSON(?): Yes, 350 million with an IOC date in the early 1990 time frame.

HOWARD BENEDICT: And what would be some of those capabilities?

JOHNSON(?): Well, it will obviously be compatible with the shuttle, and ride in the cargo bay and have the capability of extending our range from the shuttle by about 1500 nautical miles, and it can change the inclination plane by about 7 or 8 degrees, and it will have a capability to be controlled from the ground to go out and either bring back to the shuttle or boost satellites in the higher orbit altitude.

HOWARD BENEDICT: One more question, I guess that this should be to Mr. Moore. What is the, what are the prospects for early development or at least concurrent development of the upper stage vehicle for geo-synchronous orbit?

JOHNSON: Did you hear that?

MOORE: I'm not sure -- I'm not reading you. Can you elaborate a little bit?

HOWARD BENEDICT: Well, you have an orbital maneuvering vehicle, and then you ... vehicle to reach to the stationary orbit with heavier payloads.

MOORE: Yes, I think I understand what you are saying. You are talking about orbit transfer vehicle, which is a later vehicle. We are, at the present time, simply doing some studies and are trying to develop the technology programs that would allow us to carry this out.

There are things like arrow-breaking and some other technologies that we are in the process of studying with the Office of Aeronautics and Space Technology, and I see that that is something that will happen down in the mid to the latter part of the 90s.

HOWARD BENEDICT: OK, then without the OTV being available immediately after operational development of the station, then you'll continue to use the conventional upper-stage boosters for GEO synch payloads, is that correct?

MOORE: Yes. Until we get this full range of capabilities

in place, we will use our conventional techniques for boosting satellites up the geo-stationary orbit.

JOHNSON: All right, we'll take one more, if there is one -- we'll take one more question from KSC, and then move on to Johnson.

HOWARD BENEDICT: OK, that is all of the questions from KSC.

JOHNSON: All right, then we'll go to Johnson.

JIM ASKER, HOUSTON POST: This is for Jim Beggs. Leaders on both sides of the isle in Congress have pretty well indicated that the President's budget will be dead on arrival. I am wondering what are you going to do when the leaders in Congress come to you, and say, Jim, we need you to trim a little more out of your budget? Where will you look, or do you think that somehow NASA will survive as a sacred cow this year?

JIM BEGGS: I don't know what -- I hardly ever try to predict what the Congress is going or not going to do, and so I really can't speculate very much on what they are going to do. I read the papers and your news reports every morning, and look at the television newscasts every evening, and I can't really discern that there is a real trend in what the Congress might do with the President's budget. I wouldn't accept your assumption

that the President's budget will be dead on arrival. I think that at the very minimum, that the President's budget will be a starting point for their deliberations and exercises. In the past, the NASA budget has generally been given a very good hearing, and we have had acceptance over the past several years pretty close to what the President has proposed for NASA. There have been, to be sure, some movement within the budget; that is, there have been some programs that have been moved around -- some new program content added -- I mentioned a couple of those with my remarks, but overall, the totals have remained fairly close to what the President has requested.

I cannot discern what they might do. We are a relatively portion of a much larger budget bill, which includes housing and urban development, and all of other independent agencies in town, and I would guess that we will be a very, relatively very small consideration in the larger picture.

The NASA budget, while it is significant in total, being close to \$8 billion, the total budget this year, what is it this year, Tommy, 793 billion...?

TOMMY: It's over a trillion.

JIM BEGGS: Over a trillion! Little over a trillion. So, we seem to be holding our own as that .8 of 1% of the federal budget. And I don't think that we will be held captive very much to the total.

Our increasees, where they are, are very modest. What we are doing is maintaining our buying power, which is what you have to do if you are going to run these long-term programs, and I think that the Congress recognizes that.

JOHNSON: Do we have any further questions from Johnson?

JIM ASKER: No further questions from Johnson.

JOHNSON: All right, now we'll go to Langley.

SPEAKER FROM LANGLEY: No questions from Langley.

JOHNSON: No questions from Langley. Do we have (NOTE: the rest of this question is inaudible).

HARRY ROSENTHAW, ASSOCIATED PRESS: Can you say please how much money you did ask for for the space station this year, and how much money did you not get in the budget that the President is proposing? In other words, how far were you cut down?

JIM BEGGS: Well, the question is cut down from what? We have a wish-list that adds up to very large numbers. The space station was, is one that is a matter of record because we went in with a run-out last year, and it was 280 in that run-out. So, it is down by 50 million over what we had run it out last year.

But, other than that, I guess I just assume not comment on the amounts that were cut down because I don't really think I could in that there are various asundry accounts where there is a lot of give and take in this budget, and clearly, we didn't contemplate taking a 5% salary decrease when we we in, so the, I think, \$42 million was taken out of the budget for that -- it is some thing that was in it before we got into the give and take.

But, other than that, it was merely a question of structuring the program to fit about that 1% real growth that we had agreed to.

JOHNSON: Teresa Foley?

TERESA FOLEY, SPACE COMMERCE BULLETIN: I had a couple of questions. One is personnel oriented. Would you care to address persistent rumors that you'll be leaving the agency? Or have you talked to the President about how long you'll be staying? And when can we expect a replacement for Hans Mark to be named?

JIM BEGGS: I am not leaving and probably within a month on Hans Mark.

TERESA FOLEY: Another question -- Can you give us some more information on the new line item for commercial programs -- what that will provide? And what are some of the goals for that office for 86?

JIM BEGGS: Ike, do you want to come up here and comment?

IKE GALLOP: That'll provide funds in the following areas in 86. We have some funds in for centers of excellence. These will be research areas. We have some funds in for facilities and equipment that will be made available to the private sector for research and experimentation. We have some funds in for additional NASA research with particular interests for the private sector. And we have funds in for studies analyses and procedural improvements within the agency, aimed at improving access to space for the private sector. That totals up to the 30 million that we have.

JOHNSON: Thank you.

KEN SILVERSTAN, DEFENSE DAILY: I know that you don't want to go through a budget conference without talking about the fifth orbiter! (laughter) Could you tell us what your thinking is now about added funds for spares or plans to buy a fifth orbiter? And secondly, do you have any comment on the proposal by the Grace Commission that you could save a billion dollars if you would let a private sector firm buy an orbiter?

JIM BEGGS: Well, clearly, the fifth orbiter is not in this budget. We do have a continuation of the structural spares buy, and that was augmented last year by the Congress, and we will

spent that money to buy in as much as we can in terms of the structural spares to maintain a production base and a subcontractor base.

The question of whether or not a fifth orbiter can be provided, I think, depends really on how much money becomes available in future years. If it were decided to go forward with that, it would require another billion four, I guess, something like that, a billion, 400 million, or thereabouts, to buy in the fifth orbiter, and that would impact the out years rather significantly.

But it isn't in these years. The plain facts are that on the current shuttle manifest, we are looking at, you cannot justify the purchase of a fifth orbiter. A couple of years ago, or three years ago, when I first got here, we had anticipated that the market would develop rather more quickly.

I might comment on that just a bit. We took a look at the projections that were made back in the 70s, and those market projections were right on on the commercial market. We still are very close to what we were projecting back in the mid-70s, in terms of the commercial development. The thing that has, or the two areas that have come down, decreased, quite significantly, is the military market, which we look on as very important, in spite of all of those articles you all wrote, or some of you wrote, when they were flying in January, that they oughtn't to fly on the shuttle. They are a very important piece of our market, and if you are going to justify a fifth orbiter, we need the full

military market. And that market is down very significantly, like about a less than a third, if my memory serves, as to what they were projecting back in the mid-70s, in this time period. And even in the out-years.

And the other market area that is down is in the government sponsored launches; that is, NASA and the other government agencies, which is also down very significantly. I we had those initial projections, then you'd need a fifth orbiter. But since we don't, it is very hard to justify one based on the market that we are looking at today.

And so we are going to continue to buy those structural spares and we will look forward to trying to keep that production base in place a little longer.

With respect to somebody supplying the fifth orbiter, all of the proposals that we have received from private companies, for purchase of a fifth orbiter and supplies to the government, or in any other way, always resulted in higher expenditures by the government than otherwise; in short, there were no savings. For a proposal of that sort to be attractive to us, it would have to show us where we could truly reduce our costs in the government. And so far, we haven't seen a proposal that would do that.

JOHNSON: We have another question down front, then Mike Mitchem. Over here ...

KELLY BEADY, SKINE TELESCOPE: Perhaps, Just Moore, this is for you. My understanding is that the shuttle operational costs were eventually to be paid for by the users, not for the development cost, the operations cost. With the absence of the fifth orbiter, and with the increasing competition from Areon(?), is it unlikely that NASA will now be able to recover its shuttle operations costs?

JIM BEGGS: Well, wait a minute, I'd like to respond to this. There has been much written about the fact that the shuttle was supposed to be covered -- the costs of the shuttle -- were supposed to be covered by its customer base. That is totally wrong! It is 100% wrong! It was never contemplated that the shuttle operating costs would be covered fully by the users.

It was, as a matter of fact, quite the contrary. If you go back and read the Presidential statements on this going back to Mr. Nixen and Mr. Ford, Mr. Carter, and now President Reagan, you will find that all of them say that the shuttle is considered to be the national means of launch service for the country, as the primary means, of launch service for the country. And that we would carry commercial and other customers who would reimburse, reimbursable customers, on the basis of space available, and recovering from them the full operating costs for their share.

But we never intended to cover the full costs of the shuttle from the users. It was considered from the beginning to be the primary national means of getting into space, and that NASA

would continue to operate it until it could perhaps be turned over to somebody else, but it was never envisioned that the full costs of it would be covered by reimbursable customers.

BEADY(?): Just the operational costs?

JIM BEGGS: A share of the operational costs. We have never, to my certain knowledge, going back, since I've had a long association with this agency, going back 15 or 20 years, to my certain knowledge, we have never tried to recover the fixed costs, the R&D investment, or the investment in facilities on any launch vehicle that we have ever developed.

In the case of the Delta, and the Atlas, and the Titan, they were developed primarily by the DoD, and additional costs were incurred to convert those for various launches for NASA, but we never tried to recover any of those costs, and aren't trying to recover now. When we turn those over, or signed agreements, with private concerns to operate those, we never asked that they recover any of the costs of development or the fixed costs of the launch facilities or anything else.

It seems to be a lot being written and a lot of it is a re-write of history, as far as I can see. We have never tried to recover any of the investment costs of any of our launch systems. And indeed, that goes for any other part or kind of transportation. We never try to recover the costs of highways or airports, or airways, or anything else that we build to provide

for transportation in this country. Those are considered sunk costs, and are written off as incurred.

JOHNSON: Dave Duly?

DAVE DULY: With respect to the military market, ...

JIM BEGGS: Do you want to add anything to that ...

SPEAKER: (The comment here is not audible)

DAVE DULY: With respect to the military market, you mentioned a couple of questions back, what is the status on the NASA Department of Defense dialogue on the complimentary expendable launch vehicle?

JIM BEGGS: It continues. (laughter)

DAVE DULY: In friendly tones? Heated tones? Exactly what is the situation ... ?

JIM BEGGS: I think generally that it is a friendly exchange of views. We are not shouting at each other.

DAVE DULY: And when is the decision expected?

JIM BEGGS: Where is Norman? When is the decision expected?

NORMAN: Soon.

JIM BEGGS: Soon! (laughter)

MIKE MITCHEM: Speaking of costs, Mr. Beggs, do you some projections of revenues that you expect out of the shuttle in the 86 time frame?

JIM BEGGS: Well, we are on record on the Hill as to what our costs and cost projections are, and they are in the public record as to where we are going on shuttle costs. And that continues to this day. We think we are pretty much on the learning curves, and on the cost projections that we gave to Congress last year.

If anything has changed, it has changed in the direction of being a little better than it was last year. In any launch system, of course, the most sensitive parameter is launch rate. And because you do have a very large fixed cost associated with this -- you keep a marching army going for the launch system no matter how many times you launch, and it takes about the same number of people on board, whether you launch twice a year or 20 times a year, and so the costs that we have can be divided either 10 times a year, or 20 times a year, depending on the launch rate. The total cost that we have for the system today, the

operating costs that are projected in 1986 are about two, a little over two billion dollars, two billion one. We're going to launch eleven times, excuse me, fourteen times, so you can divide that up for yourself. But the reimbursements in 1986 are about 418 million, so you take 418 from two billion one and that tells you what the government's cost per launch is, if you divide those numbers properly.

So we're getting down somewhere in the 120, 130 million dollars per flight in 1986, and we expect those costs to continue to come down as we increase the flight rate, increase the reimbursements and decrease the, both the costs of manufacturing the consumable parts of the shuttle and the, improve our efficiencies in the launch crews that are down there.

QUESTION:

If memory serves, I believe you estimated revenues in 1985 to be somewhere around 600 million. Are we seeing a drop off there or are ...

BEGGS:

It varies year by year and the reason it varies is primarily, you know, we're on a schedule with the DoD. They're the biggest swinger in this thing. And it varies year by ...

QUESTION:

... list by program, so to speak, some of the stronger initiatives you hope to get in both space and aero that were disallowed perhaps Topex, things of that nature.

BEGGS:

Well, Topex was one we had hoped to get in. That's been well advertised. We had hoped to go forward with the composite structures program and the aeronautics program. That's one that was a victim of the crunch. Those are the two I recall most easily. Tommy, do you know of any others?

TOMMY:

Well, we'd hoped to go ahead with the gravity probe, the engineering flight demonstration, and that's been deferred.

BEGGS:

I think those are the main ones.

QUESTION:

In the explore budget, there is about a four or five million dollar increase there. Are there any new spacecraft buried, being started there in the explorer budget?

BEGGS:

No, it's pretty much a continuation of, that's just a runout of the program. This is, as you know, sort of typical of that budget. You start programs, they build up and then they tail off and as they tail off you try to put new ones in. We're just in the buildup phase of several.

DON KIRKMAN, SCRIPPS HOWARD NEWSPAPERS:

Mr. Beggs, Don Kirkman, Scripps Howard Newspapers. Going back to the space station, last year you said the space station estimate was about eight billion. Now, at that time, there was some confusion over whether the Europeans were going to pay

part of that. Now I understand ...

BEGGS:

I hope there wasn't confusion on that point. We never envisioned that the Europeans would pay part of the eight billion.

KIRKMAN:

As I understand the situation now, your estimate is eight billion spent by the United States and somebody at the agency told me about 3.4 billion dollars spent by ESA, Japan, the Canadians, etc., so forth, total about 11 and one-half. Is that the way it shapes up to you now?

BEGGS:

Well, I can't gainsay what the Europeans and the Japanese will ultimately decide to spend but that's sort of a kind of estimate that we've made of what our various foreign partners would invest in the program, so it would be something over eleven, yes. So far I have no reason to change my view on that, although again, I would emphasize that the decision that was taken by the Europeans in Rome, was merely a decision to go through the Phase B effort with us. That was not a decision on the hardware phase as yet and that's as expected, but they would not make a decision on the hardware phase at this point. But there's nothing in the decision that would at all reduce our expectations in the future.

SPEAKER:

We have time for one more question in Washington if there

is one.

JOHNATHAN EBERHARDT, SCIENCE NEWS:

Has the , have the problems with the high data rate uplinks through TDRSS One had any effect on planning for how soon TDRSS D would be brought on line, with any effects on the funding for that?

Bob Ballard can respond. Bob?

BALLARD:

You're referring to the caveman uplink situation that failed on the (inaudible) up there. We have one link on that vehicle. One high data rate (inaudible) plans are to launch this next one next month, number two. And number three later in the year. And we're considering launch of the fourth vehicle sometime in the 86/87 time frame. It will depend on how healthy the configuration is for those three vehicles. But right now, on the one up there, we have one operating forward link. That's 25 megabit forward link for graphics and data to the crews. Does that answer your question?

EBERHARDT:

There's one forward link and no links in the other direction at a high rate?

BALLARD:

Oh, yes. All of our downlinks are operable. High data rate down are operable. That's K vanned also, but the link that failed is the link that goes from the TDRSS spacecraft to the user spacecraft. For instance, from TDRSS to shuttle. That's

the high data forward link and that's not operable. We have no user that absolutely requires that capability right now.

SPEAKER:

Are there any questions from the centers? Thank you very much for coming. Meetings over.

NASA News

National Aeronautics and
Space Administration

Washington, D.C. 20546
AC 202-453-8400

For Release:

UPON RELEASE OF PRESIDENT'S
BUDGET MESSAGE, 12:00 NOON
FEBRUARY 4, 1985

BACKGROUND MATERIAL

NASA FY 1986 BUDGET BRIEFING

HOLD FOR RELEASE AT 12:00 NOON, EST, MONDAY, FEBRUARY 4, 1985

NOTE: This statement relates to the Fiscal Year 1986 Budget and is subject to the same conditions. There should be no premature release of this statement nor should any of its contents be paraphrased or alluded to in earlier stories. There is a total embargo on the Budget until 12:00 Noon, EST, February 4, 1985, which includes any and all references to any material in the Budget Appendix, or support statements.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

FY 1986 BUDGET SUMMARY
(Thousands of Dollars)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
RESEARCH AND DEVELOPMENT.....	2,064,200	2,422,600	2,881,800
SPACE FLIGHT, CONTROL AND DATA COMMUNICATIONS.....	3,772,300	3,601,800	3,509,900
CONSTRUCTION OF FACILITIES.....	155,500	150,000	149,300
RESEARCH AND PROGRAM MANAGEMENT.....	<u>1,255,908</u>	<u>1,336,300</u>	<u>1,345,000</u>
TOTAL BUDGET SUMMARY.....	<u>7,247,908</u>	<u>7,510,700</u>	<u>7,886,000</u>
OUTLAYS.....	7,047,600	7,317,000	7,772,000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RESEARCH AND DEVELOPMENT PROGRAMS

BUDGET SUMMARY
(Thousands of Dollars)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>SPACE STATION.....</u>	<u>(21,900)</u>	<u>150,000</u>	<u>230,000</u>
SYSTEM DEFINITION.....	(5,500)	52,000	74,000
TECHNOLOGY AND MANAGEMENT INTEGRATION.....	(16,400)	98,000	156,000
 <u>SPACE TRANSPORTATION CAPABILITY</u>			
<u>DEVELOPMENT.....</u>	<u>431,700</u>	<u>351,400</u>	<u>459,300</u>
SPACELAB.....	111,000	58,300	96,700
UPPER STAGES.....	143,200	92,400	122,000
ENGINEERING AND TECHNICAL BASE.....	93,100	105,700	109,700
PAYLOAD OPERATIONS AND SUPPORT EQUIPMENT.....	59,600	56,300	63,900
ADVANCED PROGRAMS.....	21,500	20,500	21,000
TETHERED SATELLITE SYSTEM.....	3,300	18,200	21,000
ORBITAL MANEUVERING VEHICLE.....	---	---	25,000

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RESEARCH AND DEVELOPMENT PROGRAMS

BUDGET SUMMARY (Thousands of Dollars)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>SPACE APPLICATIONS</u> (Continued)			
ENVIRONMENTAL OBSERVATIONS.....	162,000	212,700	317,500
Upper atmosphere research and analysis.....	(28,435)	(31,000)	(33,000)
Atmospheric dynamics and radiation research and analysis...	(27,465)	(28,500)	(30,300)
Oceanic processes research and analysis.....	(18,200)	(19,400)	(20,600)
Space physics research and analysis.....	(16,800)	(16,700)	(17,800)
Shuttle/Spacelab payload development.....	(7,600)	(7,800)	(5,600)
Operational satellite improvement program.....	(600)	(---)	(---)
Earth radiation budget experiment.....	(15,500)	(8,100)	(2,000)
Extended mission operations.....	(27,400)	(29,500)	(37,000)
Interdisciplinary research and analysis.....	(---)	(1,000)	(1,000)
Tethered satellite payloads.....	(---)	(3,000)	(4,500)
Scatterometer.....	(---)	(12,000)	(31,700)
Upper atmosphere research satellite mission.....	(20,000)	(55,700)	(134,000)
MATERIALS PROCESSING IN SPACE.....	25,600	27,000	34,000
COMMUNICATIONS.....	41,100	60,600	106,200
INFORMATION SYSTEMS.....	8,900	16,200	19,200
<u>TECHNOLOGY UTILIZATION</u>	<u>9,000</u>	<u>9,500</u>	<u>11,100</u>
<u>COMMERCIAL USE OF SPACE</u>	<u>---</u>	<u>(8,500)</u>	<u>30,000</u>

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

SPACE FLIGHT, CONTROL AND DATA COMMUNICATIONS PROGRAMS

BUDGET SUMMARY
(Thousands of Dollars)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
<u>SPACE SHUTTLE PRODUCTION AND OPERATIONAL CAPABILITY.....</u>	<u>1,646,300</u>	<u>1,492,100</u>	<u>976,500</u>
Orbiter.....	724,900	655,300	333,600
Launch and Mission Support.....	277,700	229,800	163,900
Propulsion Systems.....	638,200	582,000	454,000
Changes and Systems Upgrading.....	5,500	25,000	25,000
 <u>SPACE TRANSPORTATION OPERATIONS.....</u>	 <u>1,452,000</u>	 <u>1,314,000</u>	 <u>1,725,100</u>
Shuttle Operations.....	1,402,000	1,314,000	1,725,100
Flight operations.....	(343,300)	(315,200)	(425,200)
Flight hardware.....	(729,500)	(722,900)	(964,000)
Launch and landing operations.....	(329,200)	(275,900)	(335,900)
Expendable Launch Vehicles.....	50,000	---	---
 <u>SPACE AND GROUND NETWORK, COMMUNICATIONS AND DATA SYSTEMS.....</u>	 <u>674,000</u>	 <u>795,700</u>	 <u>808,300</u>
Space Network.....	259,100	378,300	400,800
Ground Network.....	249,300	233,200	219,300
Communications and Data Systems.....	165,600	184,200	188,200
 <u>TOTAL.....</u>	 <u><u>3,772,300</u></u>	 <u><u>3,601,800</u></u>	 <u><u>3,509,900</u></u>

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RESEARCH AND PROGRAM MANAGEMENT

BUDGET SUMMARY

SUMMARY OF BUDGET BY INSTALLATION (Thousands of Dollars)

	<u>FY 1984</u>	<u>FY 1985</u>	<u>FY 1986</u>
Johnson Space Center.....	200,963	211,978	213,713
Kennedy Space Center.....	172,632	181,980	189,331
Marshall Space Flight Center.....	189,852	197,576	195,805
National Space Technology Laboratories	10,194	10,940	11,131
Goddard Space Flight Center.....	186,773	199,482	199,719
Ames Research Center.....	113,887	121,527	123,908
Langley Research Center.....	139,953	148,731	149,059
Lewis Research Center.....	128,704	139,258	139,896
NASA Headquarters.....	108,216	118,950	116,835
Inspector General.....	<u>4,734</u>	<u>5,878</u>	<u>5,603</u>
TOTAL.....	<u>1,255,908</u>	<u>1,336,300</u>	<u>1,345,000</u>

PERMANENT CIVIL SERVICE WORKYEARS BY INSTALLATION

Johnson Space Center.....	3,196	3,222	3,201
Kennedy Space Center.....	2,074	2,075	2,054
Marshall Space Flight Center.....	3,270	3,251	3,229
National Space Technology Laboratories	107	109	106
Goddard Space Flight Center.....	3,608	3,599	3,569
Ames Research Center.....	2,023	2,021	2,001
Langley Research Center.....	2,869	2,860	2,808
Lewis Research Center.....	2,634	2,604	2,582
NASA Headquarters.....	1,327	1,326	1,292
Inspector General.....	<u>90</u>	<u>97</u>	<u>97</u>
Subtotal, Full-Time Permanent.....	21,198	21,164	20,939
Other than Full-Time Permanent.....	<u>882</u>	<u>836</u>	<u>861</u>
TOTAL.....	<u>22,080</u>	<u>22,000</u>	<u>21,800</u>